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=> d his ful

     FILE 'HCAPLUS' ENTERED AT 10:26:02 ON 14 JUN 2005
                  E KOTANI MAYUMI/AU
L1             19 SEA ABB=ON  "KOTANI MAYUMI"/AU
                  E FUJITA AKIHITO/AU
L2             18 SEA ABB=ON  "FUJITA AKIHITO"/AU
                  E MATSUMOTO MOTONOBU/AU
L3             19 SEA ABB=ON  "MATSUMOTO MOTONOBU"/AU
L4              6 SEA ABB=ON  L1 AND L2 AND L3
                  SELECT RN L4 1-1

     FILE 'REGISTRY' ENTERED AT 10:27:59 ON 14 JUN 2005
L5              6 SEA ABB=ON  (117-39-5/BI OR 153-18-4/BI OR 480-10-4/BI OR
                  520-18-3/BI OR 528-48-3/BI OR 529-44-2/BI)

     FILE 'HCAPLUS' ENTERED AT 10:28:12 ON 14 JUN 2005
L6              5 SEA ABB=ON  L4 AND L5
L7                ANALYZE L6 1-1 CT :      13 TERMS
L8             37 SEA ABB=ON  L1 OR L2 OR L3 OR L4
L9              6 SEA ABB=ON  L8 AND ?ASTRAGALIN?
                  SELECT RN L9 1-6

     FILE 'REGISTRY' ENTERED AT 10:35:30 ON 14 JUN 2005
L10            17 SEA ABB=ON  (480-10-4/BI OR 89-78-1/BI OR 117-39-5/BI OR
                  153-18-4/BI OR 50-99-7/BI OR 520-18-3/BI OR 528-48-3/BI OR
                  529-44-2/BI OR 57-48-7/BI OR 585-86-4/BI OR 585-88-6/BI OR
                  59-23-4/BI OR 63-42-3/BI OR 64-17-5/BI OR 64519-82-0/BI OR
                  69-65-8/BI OR 7732-18-5/BI)
L11             0 SEA ABB=ON  L9 AND L10

     FILE 'HCAPLUS' ENTERED AT 10:35:49 ON 14 JUN 2005
L12             6 SEA ABB=ON  L9 AND L10

     FILE 'REGISTRY' ENTERED AT 10:40:56 ON 14 JUN 2005
L13             1 SEA ABB=ON  480-10-4/RN

     FILE 'HCAPLUS' ENTERED AT 10:41:07 ON 14 JUN 2005
L14          1468 SEA ABB=ON  L13 OR ?ASTRAGALIN?
L15             9 SEA ABB=ON  L14 AND (?ALLERGY? OR ?POLLINOSIS?)

     FILE 'MEDLINE, CANCERLIT, JICST-EPLUS, FEDRIP, PASCAL, BIOSIS, EMBASE,
     BIOTECHNO, JAPIO, ESBIOBASE, SCISEARCH' ENTERED AT 10:42:13 ON 14 JUN 2005
L16             7 SEA ABB=ON  L15
L17             4 DUP REMOV L16 (3 DUPLICATES REMOVED)   4 cits from above d.b.'s

     FILE 'HCAPLUS' ENTERED AT 10:43:01 ON 14 JUN 2005
L18             5 SEA ABB=ON  L15 AND (PRD<20000324 OR PD<20000324)   5 cits from
                                                                       CA Plus
     FILE HCAPLUS

     FILE COVERS 1907 - 14 Jun 2005  VOL 142 ISS 25
     FILE LAST UPDATED: 13 Jun 2005  (20050613/ED)

     New CAS Information Use Policies, enter HELP USAGETERMS for details.

     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
     provided by InfoChem.
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STRUCTURE FILE UPDATES: 13 JUN 2005 HIGHEST RN 852200-37-4
DICTIONARY FILE UPDATES: 13 JUN 2005 HIGHEST RN 852200-37-4

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

FILE MEDLINE
FILE LAST UPDATED: 12 JUN 2005 (20050612/UP). FILE COVERS 1950 TO DATE.

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

FILE CANCERLIT
FILE COVERS 1963 TO 15 Nov 2002 (20021115/ED)

On July 28, 2002, CANCERLIT was reloaded. See HELP RLOAD for details.

CANCERLIT thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2002 vocabulary. Enter HELP THESAURUS for details.

FILE JICST-EPLUS
FILE COVERS 1985 TO 13 JUN 2005 (20050613/ED)

THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED TERM (/CT) THESAURUS RELOAD.

FILE FEDRIP

FILE COVERS CURRENT DATA. LAST UPDATE: 26 APR 2005 (20050426/ED)

FILE PASCAL
FILE LAST UPDATED: 6 JUN 2005 <20050606/UP>
FILE COVERS 1977 TO DATE.

FILE BIOSIS
FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 10 June 2005 (20050610/ED)

FILE RELOADED: 19 October 2003.

FILE EMBASE
FILE COVERS 1974 TO 9 Jun 2005 (20050609/ED)

FILE BIOTECHNO
FILE LAST UPDATED: 7 JAN 2004 <20040107/UP>
FILE COVERS 1980 TO 2003.

FILE JAPIO
FILE LAST UPDATED: 8 JUN 2005 <20050608/UP>
FILE COVERS APR 1973 TO FEBRUARY 24, 2005

FILE ESBIOBASE
FILE LAST UPDATED: 14 JUN 2005 <20050614/UP>
FILE COVERS 1994 TO DATE.

FILE SCISEARCH
FILE COVERS 1974 TO 9 Jun 2005 (20050609/ED)

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=> d que stat l18
L13           1 SEA FILE=REGISTRY ABB=ON  480-10-4/RN
L14        1468 SEA FILE=HCAPLUS ABB=ON  L13 OR ?ASTRAGALIN?
L15           9 SEA FILE=HCAPLUS ABB=ON  L14 AND (?ALLERGY? OR ?POLLINOSIS?)
L18           5 SEA FILE=HCAPLUS ABB=ON  L15 AND (PRD<20000324 OR PD<20000324)

=> d ibib abs hitstr l18 1-5

L18  ANSWER 1 OF 5  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2000:706991  HCAPLUS
DOCUMENT NUMBER:          133:271717
TITLE:                    Compositions for preventing and treating type I
                          allergy
INVENTOR(S):              Kotani, Mayumi; Fujita, Akihito; Matsumoto, Motonobu
PATENT ASSIGNEE(S):       Sunstar Inc., Japan; Uni-Sunstar B.V.
SOURCE:                   PCT Int. Appl., 29 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     WO 2000057888         A1    20001005    WO 2000-JP1801          20000324 <--
         W:  CA, JP, US
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
     CA 2368574            AA    20001005    CA 2000-2368574         20000324 <--
     EP 1172109            A1    20020116    EP 2000-911330          20000324 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
PRIORITY APPLN. INFO.:                       JP 1999-84395       A  19990326 <--
                                             JP 1999-123633      A  19990430 <--
                                             JP 1999-173731      A  19990621 <--
                                             WO 2000-JP1801      W  20000324
AB   Disclosed are food compns. for preventing type I allergy which
     contain as the active ingredient kaempferol-3-glucoside; medicinal compns.
     for preventing and treating type I allergy which contain as the
     active ingredient kaempferol-3-glucoside; and skin prepns. for external
     use for preventing and treating type I allergy which contain as
     the active ingredient kaempferol-3-glucoside.
IT   480-10-4, Kaempferol-3-glucoside
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (kaempferol glucoside for preventing and treating type I
        allergy)
RN   480-10-4  HCAPLUS
CN   4H-1-Benzopyran-4-one, 3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(4-
     hydroxyphenyl)- (9CI)  (CA INDEX NAME)

Absolute stereochemistry.
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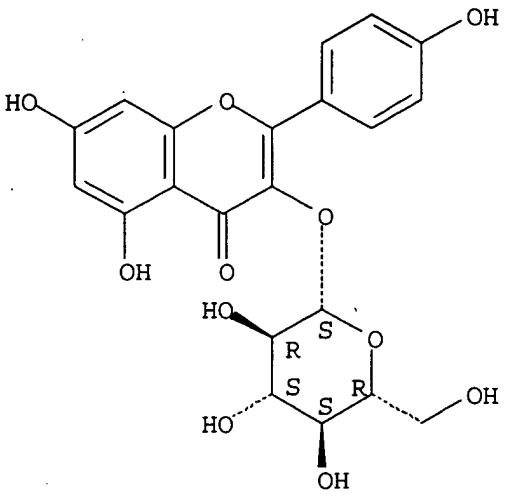


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:572079 HCAPLUS
DOCUMENT NUMBER: 134:141496
TITLE: Persimmon leaf extract and **astragalin** inhibit development of dermatitis and IgE elevation in NC/Nga mice
AUTHOR(S): Kotani, Mayumi; Matsumoto, Motonobu; Fujita, Akihito; Higa, Shinji; Wang, Way; Suemura, Masaki; Kishimoto, Tadamitsu; Tanaka, Toshio
CORPORATE SOURCE: Research and Development Center, Sunstar Incorporation, Osaka, 565-0871, Japan
SOURCE: Journal of Allergy and Clinical Immunology (**2000**), 106(1, Pt. 1), 159-166
CODEN: JACIBY; ISSN: 0091-6749
PUBLISHER: Mosby, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors previously found that persimmon leaf extract contains antiallergic substances that inhibit histamine release by human basophilic cell line KU812 in response to cross-linkage of FcεRI. The purpose here was to identify substances in the persimmon leaf extract that are responsible for the effect and to examine their in vivo effects on the allergic mouse model. HPLC anal. of persimmon leaf extract was done to measure its content. Inhibitory activity of persimmon leaf extract or its major constituent **astragalin** on the histamine release by KU812 cells was examined To investigate the effects of these substances in vivo, models of passive cutaneous anaphylaxis and atopic dermatitis mice (NC/Nga) were used. Persimmon leaf extract or **astragalin** inhibited histamine release from KU812 in response to cross-linkage of FcεRI. Oral intake of both substances dose dependently inhibited passive cutaneous reactions. Moreover, oral administration of these substances to NC/Nga atopic dermatitis model mice led to suppression of the development of dermatitis, scratching behavior, and serum IgE elevation. Histol. analyses revealed that infiltration of inflammatory cells, especially degranulated mast cells, thickening of the epidermis, and prominent hyperkeratosis, were reduced. Immunol. studies showed that the

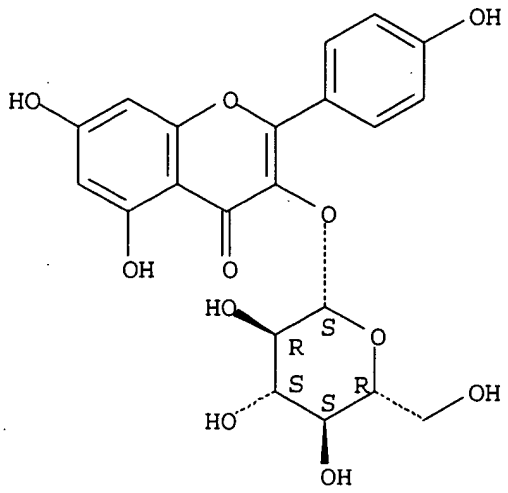
capacity of spleen T cells to produce both IL-4 and IL-13, but not IFN-γ, was downregulated by oral intake of these substances. This study thus demonstrates a novel activity of **astragalin** and the dramatic effect of persimmon leaf extract and **astragalin** on atopic dermatitis model mice.

IT **480-10-4, Astragalin**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(persimmon leaf extract and **astragalin** inhibit development of dermatitis and IgE elevation in mouse model)

RN 480-10-4 HCAPLUS

CN 4H-1-Benzopyran-4-one, 3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:196006 HCAPLUS

DOCUMENT NUMBER: 131:394

TITLE: Anti-inflammatory activity of the flavonoid components of Lonicera japonica

AUTHOR(S): Moon, Tae Chul; Park, Jeong Ok; Chung, Kwang Won; Son, Keun Ho; Kim, Hyun Pyo; Kang, Sam Sik; Chang, Hyeun Wook; Chung, Kyu Cham

CORPORATE SOURCE: Coll. Pharmacy, Yeungnam Univ., S. Korea

SOURCE: Yakhak Hoechi (**1999**), 43(1), 117-123
CODEN: YAHOA3; ISSN: 0513-4234

PUBLISHER: Pharmaceutical Society of Korea

DOCUMENT TYPE: Journal

LANGUAGE: Korean

AB Because of the potent effects of lipid mediators such as prostaglandins (PGs), leukotrienes (LTs) and platelet-activating factor (PAF) on a variety of cells and tissues, they are considered as major contributors to the process leading to inflammation and **allergy.** To pursue the mechanisms of anti-inflammatory activity of Lonicera japonica, we tested inhibitory effects of 7 flavonoids from Lonicera japonica on arachidonic

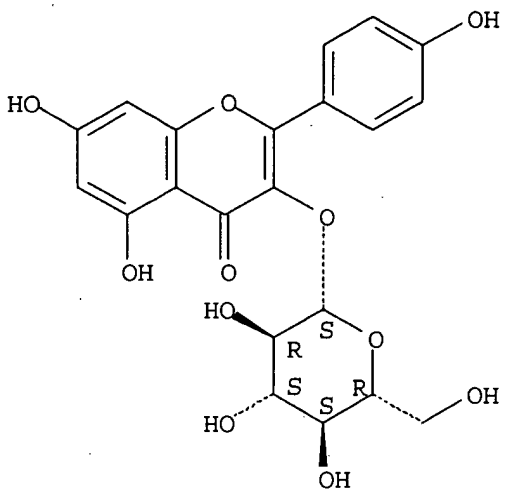
acid cascade related enzymes, such as inflammatory phospholipase A2, cyclooxygenase-1 and 2, 5-lipoxygenase, in bone marrow derived mast cells (BMMC), and lyso PAF-acetyltransferase in rat spleen microsomes. Anti-inflammatory activities of Lonicera japonica are thought to be attributed at least in part to the inhibition of arachidonic acid cascade-related enzymes by flavonoids such as apigenin, luteolin and quercetin.

IT **480-10-4, Astragalin**
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(anti-inflammatory activity of Lonicera japonica flavonoids)

RN 480-10-4 HCAPLUS

CN 4H-1-Benzopyran-4-one, 3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L18 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:342646 HCAPLUS

DOCUMENT NUMBER: 125:49208

TITLE: Antianaphylactic effects of the principal compounds from the white petals of Impatiens balsamina L.

AUTHOR(S): Fukumoto, Hisae; Yamaki, Masae; Isoi, Koichiro; Ishiguro, Kyoko

CORPORATE SOURCE: School Pharmaceutical Sciences, Mukogawa Women's University, Nishinomiya, 663, Japan

SOURCE: Phytotherapy Research (**1996**), 10(3), 202-206
CODEN: PHYREH; ISSN: 0951-418X

PUBLISHER: Wiley

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Several flavonols and naphthoquinones were isolated from a 35% ethanol extract (IB) of the white petals of I. balsamina. The antianaphylactic effects of the main compds. were investigated using a murine immediately hypersensitivity reaction system induced by hen egg-white lysozyme (HEL). The active exts. and phenolic compds. in IB inhibited significantly both the fatal anaphylactic shock and heterologous PCA reaction.

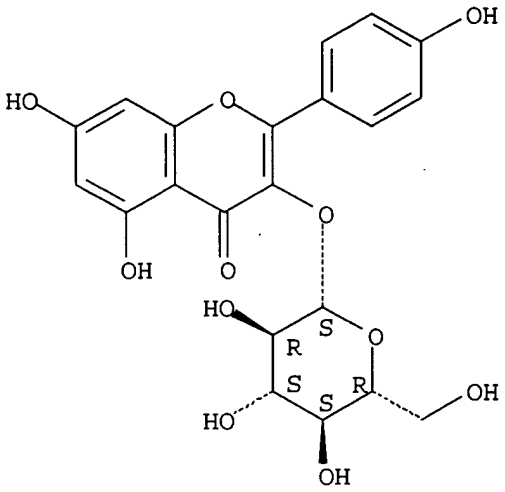
IT **480-10-4**

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(antianaphylactic effects of flavonols and naphthoquinones from Impatiens balsamina petals)

RN 480-10-4 HCAPLUS

CN 4H-1-Benzopyran-4-one, 3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L18 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:207493 HCAPLUS

DOCUMENT NUMBER: 116:207493

TITLE: Biologically active constituents of Magnolia salicifolia: inhibitors of induced histamine release from rat mast cells

AUTHOR(S): Tsuruga, Tomoko; Ebizuka, Yutaka; Nakajima, Junko; Chun, Yiu To; Noguchi, Hiroshi; Iitaka, Yoichi; Sankawa, Ushio

CORPORATE SOURCE: Fac. Pharm. Sci., Univ. Tokyo, Tokyo, 113, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (**1991**), 39(12), 3265-71
CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal

LANGUAGE: English

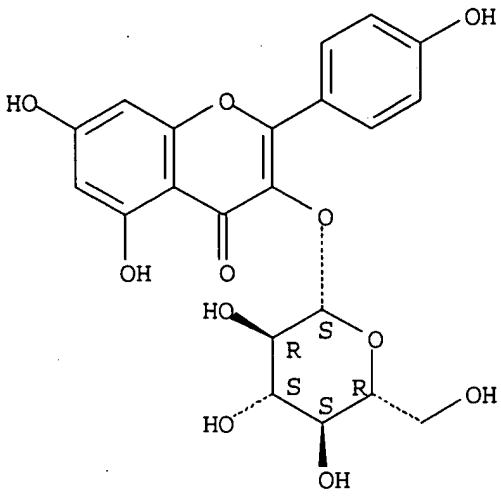
AB The exts. of the flower buds of M. salicifolia showed remarkable **antiallergy** effects in passive cutaneous anaphylaxis (PCA) test. The bioactive constituents of this medicinal drug were isolated by monitoring their activities with an in vitro bioassay system measuring inhibitory effects on induced histamine release from rat mast cells. Of the ten isolated compds. magnosalicin is a new compound of neolignan structure. In addition to the isolated compds. samples of coumarins and lignans were evaluated for biol. activities with the in vitro bioassay.

IT **480-10-4**
RL: BIOL (Biological study)
(**allergy** and histamine release inhibition by, from Magnolia salicifolia)

RN 480-10-4 HCAPLUS

CN 4H-1-Benzopyran-4-one, 3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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=> d que stat l17
L13           1 SEA FILE=REGISTRY ABB=ON  480-10-4/RN
L14        1468 SEA FILE=HCAPLUS ABB=ON  L13 OR ?ASTRAGALIN?
L15           9 SEA FILE=HCAPLUS ABB=ON  L14 AND (?ALLERGY? OR ?POLLINOSIS?)
L16           7 SEA L15
L17           4 DUP REMOV L16 (3 DUPLICATES REMOVED)

=> d ibib abs l17 1-4

L17  ANSWER 1 OF 4  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on STN
ACCESSION NUMBER:   2004:37444  BIOSIS
DOCUMENT NUMBER:    PREV200400038080
TITLE:              Effects on blood pressure decrease in response to PAF of
                    Impatiens textori MIQ.
AUTHOR(S):          Ueda, Yoshimi; Oku, Hisae; Iinuma, Munekazu; Ishiguro,
                    Kyoko [Reprint Author]
CORPORATE SOURCE:   School of Pharmaceutical Sciences, Mukogawa Women's
                    University, 11-68 Koshien Kyuban-cho, Nishinomiya,
                    663-8179, Japan
                    ishiguro@mwu.mukogawa-u.ac.jp
SOURCE:             Biological & Pharmaceutical Bulletin, (October 2003) Vol.
                    26, No. 10, pp. 1505-1507. print.
                    ISSN: 0918-6158.
DOCUMENT TYPE:      Article
LANGUAGE:           English
ENTRY DATE:         Entered STN: 7 Jan 2004
                    Last Updated on STN: 7 Jan 2004
AB   A 35% EtOH extract of flowers of Impatiens textori MIQ. showed an
     inhibitory effect on blood pressure decrease in response to platelet
     activating factor (PAF) measured with a blood pressure monitoring system.
     Bioassay-guided fractionation of the 35% EtOH extract (IT) led to
     isolation of the flavones apigenin (1) and luteolin (3), which
     significantly inhibited blood pressure decrease in response to PAF.  Their
     compounds and apigenin 7-glucoside (2), chrysoeriol (4), quercetin (5),
     quercetin 3-glucoside (6), kaempferol (7), kaempferol 3-glucoside (8) and
     kaempferol 3-rhamnosyldiglucoside (9) were also isolated from the flowers
     of I. textori for the first time.  This study revealed that the flowers of
     I. textori might be a possible anti-allergy agent.

L17  ANSWER 2 OF 4  PASCAL  COPYRIGHT 2005 INIST-CNRS. ALL RIGHTS RESERVED. on
     STN                                                  DUPLICATE 1
ACCESSION NUMBER:        2003-0525625   PASCAL
COPYRIGHT NOTICE:        Copyright .COPYRGT. 2003 INIST-CNRS. All rights
                         reserved.
TITLE (IN ENGLISH):      Fisetin, a flavonol, inhibits T.sub.H2-type cytokine
                         production by activated human basophils
AUTHOR:                  HIGA Shinji; HIRANO Toru; KOTANI Mayumi; MATSUMOTO
                         Motonobu; FUJITA Akihito; SUEMURA Masaki; KAWASE
                         Ichiro; TANAKA Toshio
CORPORATE SOURCE:        Department III of Internal Medicine, Osaka University
                         Medical School, Osaka, Japan; Research & Development
                         Center, Sunstar Incorporation, Osaka, Japan; Nissay
                         Hospital, Osaka, Japan
SOURCE:                  Journal of allergy and clinical immunology, (2003),
                         111(6), 1299-1306, 36 refs.
                         ISSN: 0091-6749  CODEN: JACIBY
DOCUMENT TYPE:           Journal
BIBLIOGRAPHIC LEVEL:     Analytic
COUNTRY:                 United States
```

LANGUAGE: English
AVAILABILITY: INIST-2059, 354000118452040200
AN 2003-0525625 PASCAL

AB Background: Activation of mast cells and basophils through allergen stimulation releases chemical mediators and synthesizes cytokines. Among these cytokines, IL-4, IL-13, and IL-5 have major roles in allergic inflammation. Objective: We sought to determine the potency of flavonoids (**astragalin**, fisetin, kaempferol, myricetin, quercetin, and rutin) for the inhibition of cytokine expression and synthesis by human basophils. Methods: The inhibitory effect of flavonoids on cytokine expression by stimulated KU812 cells, a human basophilic cell line, and freshly purified peripheral blood basophils was measured by means of semiquantitative RT-PCR and ELISA assays. The effects of flavonoids on transcriptional activation of the nuclear factor of activated T cells were assessed by means of electrophoretic mobility shift assays. Results: Fisetin suppressed the induction of IL-4, IL-13, and IL-5 mRNA expression by A23187-stimulated KU812 cells and basophils in response to cross-linkage of the IgE receptor. Fisetin reduced IL-4, IL-13, and IL-5 synthesis (inhibitory concentration of 50% [IC.sub.5.sub.0] = 19.4, 17.7, and 17.4 μmol/L, respectively) but not IL-6 and IL-8 production by KU812 cells. In addition, fisetin inhibited IL-4 and IL-13 synthesis by anti-IgE antibody-stimulated human basophils (IC.sub.5.sub.0 = 5.1 and 6.2 μmol/L, respectively) and IL-4 synthesis by allergen-stimulated basophils from allergic patients (IC.sub.5.sub.0 = 4.8 μmol/L). Among the flavonoids examined, kaempferol and quercetin showed substantial inhibitory activities in cytokine expression but less so than those of fisetin. Fisetin inhibited nuclear localization of nuclear factor of activated T cells c2 by A23187-stimulated KU812 cells. Conclusion: These results provide evidence of a novel activity of the flavonoid fisetin that suppresses the expression of T.sub.H2-type cytokines (IL-4, IL-13, and IL-5) by basophils.

L17 ANSWER 3 OF 4 PASCAL on STN
ACCESSION NUMBER: 2002-0505264 PASCAL

TITLE (IN ENGLISH): Oral administration of persimmon leaf extract ameliorates skin symptoms and transepidermal water loss in atopic dermatitis model mice, NC/Nga
AUTHOR: MATSUMOTO M.; KOTANI M.; FUJITA A.; HIGA S.; KISHIMOTO T.; SUEMURA M.; TANAKA T.
CORPORATE SOURCE: Research and Development Center, Sunstar Incorporation, Osaka, Japan; Department III of Internal Medicine, Osaka University Medical School, 2-2 Yamada-ota, Suita City, Osaka 565-0871, Japan
SOURCE: British journal of dermatology : (1951), (2002), 146(2), 221-227, 16 refs.
ISSN: 0007-0963 CODEN: BJDEAZ
DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: United Kingdom
LANGUAGE: English
AVAILABILITY: INIST-1043, 354000104416740070
AN 2002-0505264 PASCAL

AB Background We have previously shown that persimmon leaf extract and its major flavonoid constituent, **astragalin**, inhibited histamine

release by basophils and that oral administration of these substances prior to the onset into an atopic dermatitis (AD) model mouse, NC/Nga, prevented development of dermatitis. Objectives This study was designed to assess the clinical therapeutic effect of persimmon leaf extract and **astragalin** in NC/Nga mice suffering from dermatitis and the dose-response preventive effects of persimmon leaf extract on dermatitis and transepidermal water loss (TEWL). Methods The efficacy of persimmon leaf extract or **astragalin** in NC/Nga mice was judged by measurement of skin severity, scratching behaviour, serum IgE levels or TEWL. Results Oral administration of persimmon leaf extract (250 mg kg.sup.-.sup.1) or **astragalin** (1.5 mg kg.sup.-.sup.1) for 4 weeks into NC/Nga mice with overt dermatitis resulted in a decrease in the severity of the condition. The preventive effect of persimmon leaf extract on the dermatitis was dose-dependent and continuous intake of persimmon leaf extract significantly decreased its onset and development. In addition, TEWL was also suppressed at a persimmon leaf extract dose of 250 mg kg.sup.-.sup.1. No significant adverse reaction by these substances could be observed. Conclusions These observations suggest that persimmon leaf extract or the flavonoid **astragalin** may be alternative substances for the management of AD.

L17 ANSWER 4 OF 4 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2000:377311 BIOSIS
DOCUMENT NUMBER: PREV200000377311
TITLE: Persimmon leaf extract and **astragalin** inhibit development of dermatitis and IgE elevation in NC/Nga mice.
AUTHOR(S): Kotani, Mayumi; Matsumoto, Motonobu; Fujita, Akihito; Higa, Shinji; Wang, Way; Suemura, Masaki; Kishimoto, Tadamitsu; Tanaka, Toshio [Reprint author]
CORPORATE SOURCE: Department III of Internal Medicine, Osaka University Medical School, 2-2 Yamada-oka, Suita City, Osaka, 565-0871, Japan
SOURCE: Journal of Allergy and Clinical Immunology, (July, 2000) Vol. 106, No. 1 Part 1, pp. 159-166. print. CODEN: JACIBY. ISSN: 0091-6749.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 6 Sep 2000
Last Updated on STN: 8 Jan 2002

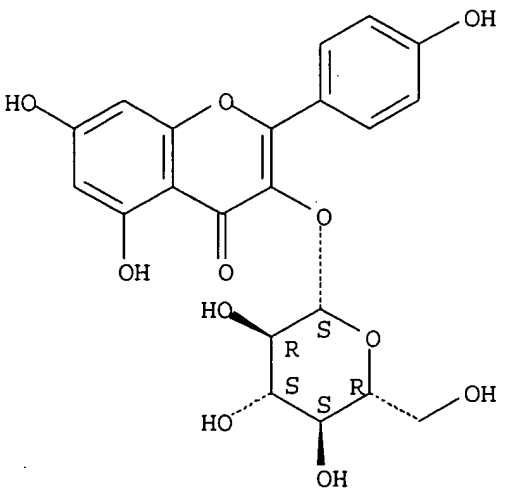
AB Background: We previously found that persimmon leaf extract contains antiallergic substances that inhibit histamine release by human basophilic cell line KU812 in response to cross-linkage of FcepsilonRI. Objectives: The purpose of this study was to identify substances in the persimmon leaf extract that are responsible for the effect and to examine their in vivo effects on the allergic mouse model. Methods: HPLC analysis of persimmon leaf extract was done to measure its content. Inhibitory activity of persimmon leaf extract or its major constituent of flavonoids (**astragalin**) on the histamine release by KU812 cells was examined. To investigate the effects of these substances in vivo, models of passive cutaneous anaphylaxis and atopic dermatitis mice (NC/Nga) were used. Results: Persimmon leaf extract or **astragalin** inhibited histamine release from KU812 in response to cross-linkage of FcepsilonRI. Oral intake of both substances dose dependently inhibited passive cutaneous reactions. Moreover, oral administration of these substances to NC/Nga atopic dermatitis-model mice led to a striking suppression of the development of dermatitis, scratching behavior, and serum IgE elevation. Histologic analyses revealed that infiltration of inflammatory cells, especially degranulated mast cells, thickening of the epidermis, and prominent hyperkeratosis, were significantly reduced. Immunologic studies

showed that the capacity of spleen T cells to produce both IL-4 and IL-13, but not IFN-gamma, was downregulated by means of oral intake of these substances. Conclusion: This study demonstrates a novel activity of **astragalin** and the dramatic effect of persimmon leaf extract and **astragalin** on atopic dermatitis-model mice.

=> d l13
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

L13 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
RN **480-10-4** REGISTRY
ED Entered STN: 16 Nov 1984
CN 4H-1-Benzopyran-4-one, 3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Astragalin (6CI, 7CI, 8CI)
OTHER NAMES:
CN 3-Glucosylkaempferol
CN 4',5,7-Trihydroxyflavone 3-β-D-glucopyranoside
CN Astragaline
CN K 5
CN Kaempferol 3-β-D-glucopyranoside
CN Kaempferol 3-β-D-glucoside
CN Kaempferol 3-glucoside
CN Kaempferol 3-O-β-D-glucopyranoside
CN Kaempferol 3-O-β-D-glucoside
FS STEREOSEARCH
DR 123474-17-9, 121136-61-6, 61247-96-9, 136529-58-3, 27661-62-7, 100569-53-7
MF C21 H20 O11
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CSCHEM, DDFU, DRUGU, EMBASE, IPA, MEDLINE, NAPRALERT, NIOSHTIC, RTECS*, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1370 REFERENCES IN FILE CA (1907 TO DATE)

10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1375 REFERENCES IN FILE CAPLUS (1907 TO DATE)
19 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
ED Entered STN: 16 Nov 1984

=> d ibib abs ind hitstr l12 1-6

L12 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:495289 HCAPLUS
DOCUMENT NUMBER: 140:22825
TITLE: Fisetin, a flavonol, inhibits TH2-type cytokine production by activated human basophils
AUTHOR(S): Higa, Shinji; Hirano, Toru; **Kotani, Mayumi**; **Matsumoto, Motonobu**; **Fujita, Akihito**; Suemura, Masaki; Kawase, Ichiro; Tanaka, Toshio
CORPORATE SOURCE: Department III of Internal Medicine, Osaka University Medical school, Osaka, 565-0871, Japan
SOURCE: Journal of Allergy and Clinical Immunology (2003), 111(6), 1299-1306
CODEN: JACIBY; ISSN: 0091-6749
PUBLISHER: Mosby, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Background: Activation of mast cells and basophils through allergen stimulation releases chemical mediators and synthesizes cytokines. Among these cytokines, IL-4, IL-13, and IL-5 have major roles in allergic inflammation. Objective: We sought to determine the potency of flavonoids (**astragalin**, fisetin, kaempferol, myricetin, quercetin, and rutin) for the inhibition of cytokine expression and synthesis by human basophils. Methods: The inhibitory effect of flavonoids on cytokine expression by stimulated KU812 cells, a human basophilic cell line, and freshly purified peripheral blood basophils was measured by means of semiquant. RT-PCR and ELISA assays. The effects of flavonoids on transcriptional activation of the nuclear factor of activated T cells were assessed by means of electrophoretic mobility shift assays. Results: Fisetin suppressed the induction of IL-4, IL-13, and IL-5 mRNA expression by A23187-stimulated KU812 cells and basophils in response to cross-linkage of the IgE receptor. Fisetin reduced IL-4, IL-13, and IL-5 synthesis (inhibitory concentration of 50% [IC50] = 19.4, 17.7, and 17.4 μmol/L, resp.) but not IL-6 and IL-8 production by KU812 cells. In addition, fisetin inhibited IL-4 and IL-13 synthesis by anti-IgE antibody-stimulated human basophils (IC50 = 5.1 and 6.2 μmol/L, resp.) and IL-4 synthesis by allergen-stimulated basophils from allergic patients (IC50 = 4.8 μmol/L). Among the flavonoids examined, kaempferol and quercetin showed substantial inhibitory activities in cytokine expression but less so than those of fisetin. Fisetin inhibited nuclear localization of nuclear factor of activated T cells c2 by A23187-stimulated KU812 cells. Conclusion: These results provide evidence of a novel activity of the flavonoid fisetin that suppresses the expression of TH2-type cytokines (IL-4, IL-13, and IL-5) by basophils.
CC 1-7 (Pharmacology)
ST antiallergic fisetin flavonoid cytokine basophil
IT Transcription factors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(NFAT (nuclear factor of activated T-cell); fisetin, a flavonol, inhibits TH2-type cytokine production by activated human basophils)
IT mRNA
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cytokines; fisetin, a flavonol, inhibits TH2-type cytokine production by activated human basophils)
IT Allergy inhibitors
Basophil
Human
Mast cell

T cell (lymphocyte)
Transcription, genetic
(fisetin, a flavonol, inhibits TH2-type cytokine production by activated human basophils)

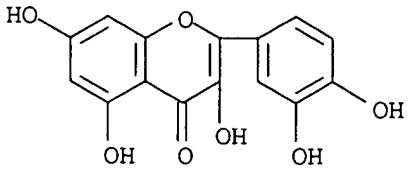
IT Cytokines
Interleukin 13
Interleukin 4
Interleukin 5
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(fisetin, a flavonol, inhibits TH2-type cytokine production by activated human basophils)

IT Flavonoids
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fisetin, a flavonol, inhibits TH2-type cytokine production by activated human basophils)

IT **117-39-5**, Quercetin **153-18-4**, Rutin **480-10-4**, **Astragalin 520-18-3**, Kaempferol **528-48-3**, Fisetin **529-44-2**, Myricetin
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fisetin, a flavonol, inhibits TH2-type cytokine production by activated human basophils)

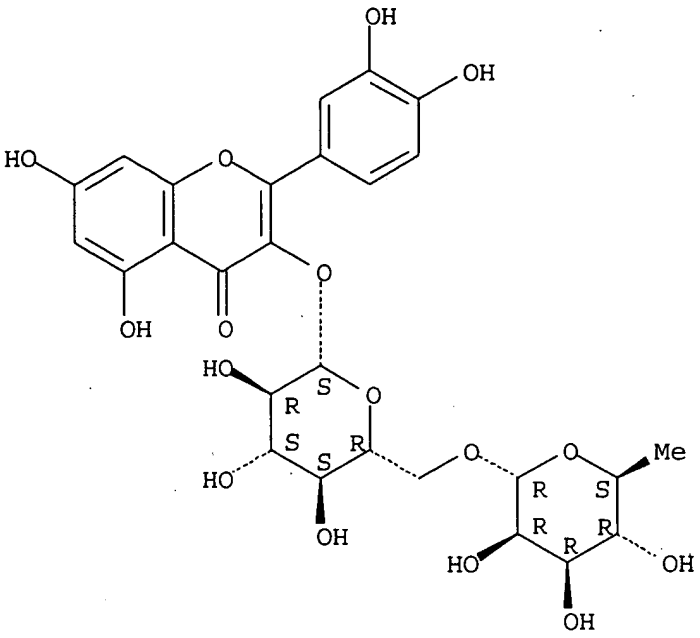
IT **117-39-5**, Quercetin **153-18-4**, Rutin **480-10-4**, **Astragalin 520-18-3**, Kaempferol **528-48-3**, Fisetin **529-44-2**, Myricetin
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fisetin, a flavonol, inhibits TH2-type cytokine production by activated human basophils)

RN 117-39-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-3,5,7-trihydroxy- (9CI) (CA INDEX NAME)



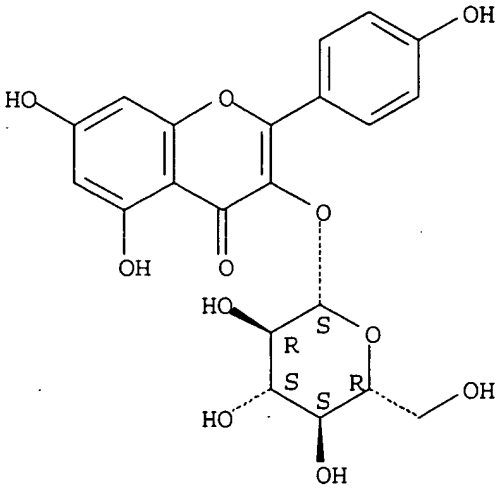
RN 153-18-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-[[6-O-(6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-2-(3,4-dihydroxyphenyl)-5,7-dihydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

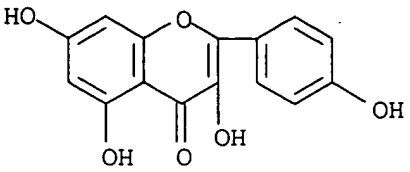


RN 480-10-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

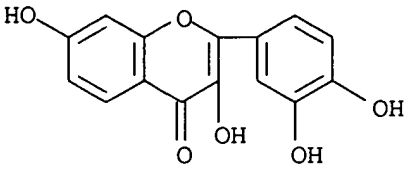
Absolute stereochemistry.



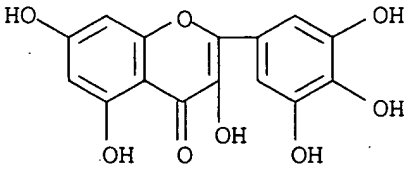
RN 520-18-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 528-48-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-3,7-dihydroxy- (9CI) (CA INDEX NAME)



RN 529-44-2 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-(3,4,5-trihydroxyphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:761295 HCAPLUS
DOCUMENT NUMBER: 137:246873
TITLE: Promotion of bioavailability of **astragalin** in leaf extract of persimmon
INVENTOR(S): Fujita, Akito; **Kotani, Mayumi**; Miyao, Manabu
PATENT ASSIGNEE(S): Sunstar, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002291441	A2	20021008	JP 2001-98148	20010330

PRIORITY APPLN. INFO.: JP 2001-98148 20010330

AB The bioavailability of **astragalin** in plant extract, especially leaf extract of persimmon, is promoted with sugar selected from fructose, galactose, lactose, and glucose. The sugar-added **astragalin** leaf extract of

persimmon is mixed with lemon, menthol, peppermint, and spearmint aroma to prepare health food.

IC ICM A23L001-30
ICS A23F003-14; A23G003-00; A23L002-52; A23L002-38; A61P009-12; A61P037-08; A61K031-352; A61K035-78; A61K047-26

CC 17-14 (Food and Feed Chemistry)
Section cross-reference(s): 63

ST **astragalin** persimmon leaf ext bioavailability sugar; health food persimmon leaf ext **astragalin** bioavailability; aroma health food persimmon **astragalin** leaf ext

IT Mentha piperita
Mentha spicata
(aroma of; stabilization of **astragalin** in leaf extract of persimmon)

IT Embryophyta
(**astragalin**-containing extract of; stabilization of **astragalin** in leaf extract of persimmon)

IT Citrus limon
(essence; stabilization of **astragalin** in leaf extract of persimmon)

IT Drug delivery systems
(granules; stabilization of **astragalin** in leaf extract of persimmon)

IT Beverages
(health; stabilization of **astragalin** in leaf extract of persimmon)

IT Candy
Diospyros
Health food
Odor and Odorous substances
Powders
(stabilization of **astragalin** in leaf extract of persimmon)

IT Carbohydrates, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(stabilization of **astragalin** in leaf extract of persimmon)

IT Drug delivery systems
(tablets, chewable; stabilization of **astragalin** in leaf extract of persimmon)

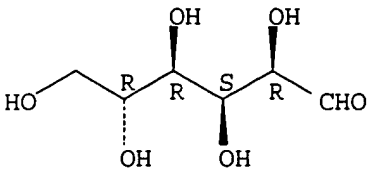
IT Drug delivery systems
(tablets; stabilization of **astragalin** in leaf extract of persimmon)

IT **50-99-7**, D-Glucose, biological studies **57-48-7**, Fructose, biological studies **59-23-4**, Galactose, biological studies **63-42-3**, Lactose **89-78-1**, Menthol **480-10-4**, **Astragalin**
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(stabilization of **astragalin** in leaf extract of persimmon)

IT **50-99-7**, D-Glucose, biological studies **57-48-7**, Fructose, biological studies **59-23-4**, Galactose, biological studies **63-42-3**, Lactose **89-78-1**, Menthol **480-10-4**, **Astragalin**
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(stabilization of **astragalin** in leaf extract of persimmon)

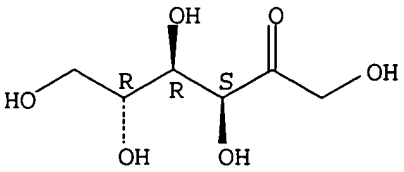
RN 50-99-7 HCAPLUS
CN D-Glucose (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



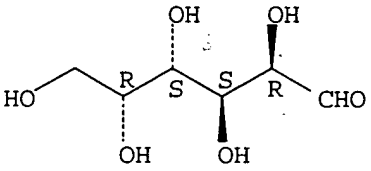
RN 57-48-7 HCAPLUS
CN D-Fructose (9CI) (CA INDEX NAME)

Absolute stereochemistry.



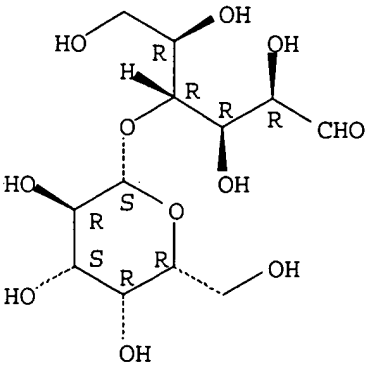
RN 59-23-4 HCAPLUS
CN D-Galactose (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



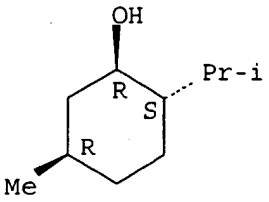
RN 63-42-3 HCAPLUS
CN D-Glucose, 4-O-β-D-galactopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



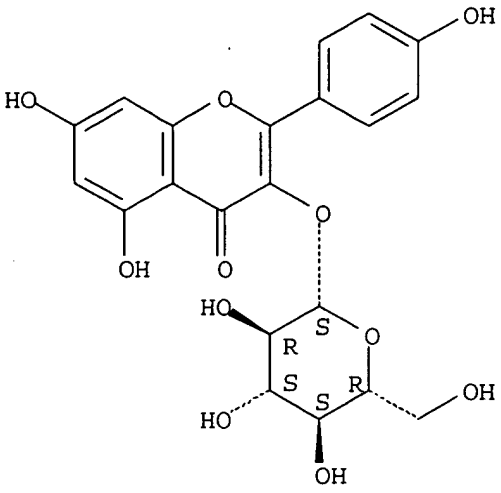
RN 89-78-1 HCAPLUS
CN Cyclohexanol, 5-methyl-2-(1-methylethyl)-, (1R,2S,5R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 480-10-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



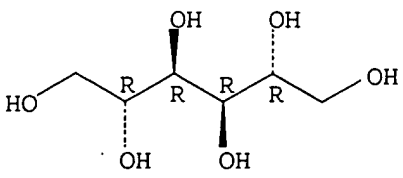
L12 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:761294 HCAPLUS
DOCUMENT NUMBER: 137:246872
TITLE: Stabilization of **astragalin** in leaf extract of persimmon
INVENTOR(S): Fujita, Akito; **Kotani, Mayumi**; Miyao, Manabu
PATENT ASSIGNEE(S): Sunstar, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002291440	A2	20021008	JP 2001-98147	20010330
PRIORITY APPLN. INFO.:			JP 2001-98147	20010330

AB The flavonoid **astragalin** in leaf extract of persimmon is stabilized with sugar alcs. selected from lactitol, mannitol, palatinit, and maltitol. The stabilized **astragalin** leaf extract of persimmon is mixed with lemon, menthol, peppermint, and spearmint aroma to prepare health

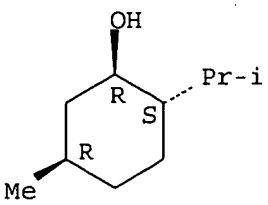
food.
IC ICM A23L001-30
ICS A23L001-30; A23G003-00; A23L002-52; A23L002-38
CC 17-14 (Food and Feed Chemistry)
Section cross-reference(s): 63
ST **astragalin** persimmon leaf ext stabilization sugar alc; food persimmon leaf ext flavonoid **astragalin** stabilization; aroma health food persimmon **astragalin** leaf ext
IT Mentha spicata
(aroma of; stabilization of **astragalin** in leaf extract of persimmon)
IT Citrus limon
(essence; stabilization of **astragalin** in leaf extract of persimmon)
IT Drug delivery systems
(granules; stabilization of **astragalin** in leaf extract of persimmon)
IT Beverages
(health, aroma of; stabilization of **astragalin** in leaf extract of persimmon)
IT Candy
Diospyros
Health food
Odor and Odorous substances
Powders
Stabilizing agents
(stabilization of **astragalin** in leaf extract of persimmon)
IT Alditols
Flavonoids
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(stabilization of **astragalin** in leaf extract of persimmon)
IT Drug delivery systems
(tablets, chewable; stabilization of **astragalin** in leaf extract of persimmon)
IT Drug delivery systems
(tablets; stabilization of **astragalin** in leaf extract of persimmon)
IT **69-65-8**, Mannitol **89-78-1**, Menthol **480-10-4**, **Astragalin 585-86-4**, Lactitol **585-88-6**, Maltitol **64519-82-0**, Palatinit
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(stabilization of **astragalin** in leaf extract of persimmon)
IT **69-65-8**, Mannitol **89-78-1**, Menthol **480-10-4**, **Astragalin 585-86-4**, Lactitol **585-88-6**, Maltitol **64519-82-0**, Palatinit
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(stabilization of **astragalin** in leaf extract of persimmon)
RN 69-65-8 HCAPLUS
CN D-Mannitol (9CI) (CA INDEX NAME)

Absolute stereochemistry.



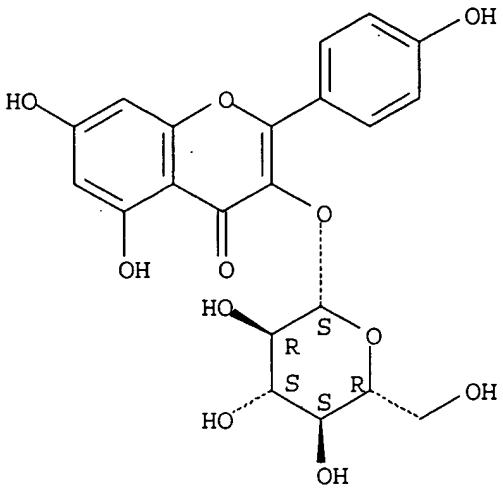
RN 89-78-1 HCAPLUS
CN Cyclohexanol, 5-methyl-2-(1-methylethyl)-, (1R,2S,5R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



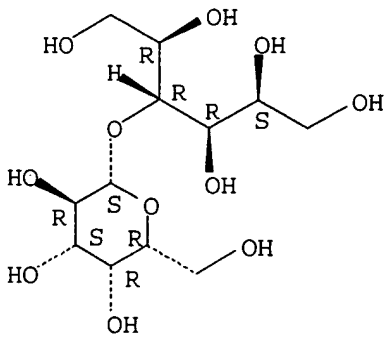
RN 480-10-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



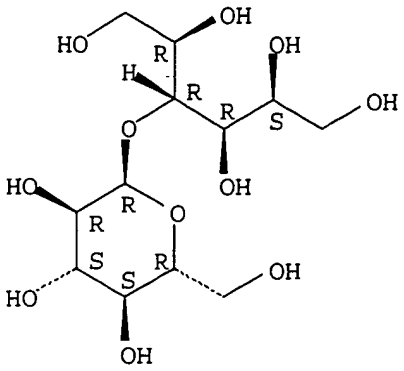
RN 585-86-4 HCAPLUS
CN D-Glucitol, 4-O-β-D-galactopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



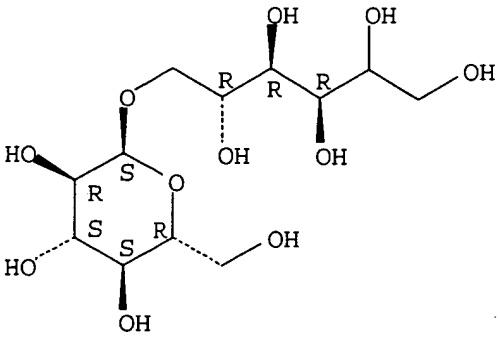
RN 585-88-6 HCAPLUS
CN D-Glucitol, 4-O-α-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 64519-82-0 HCAPLUS
CN D-arabino-Hexitol, 6-O-α-D-glucopyranosyl-, (2ξ)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

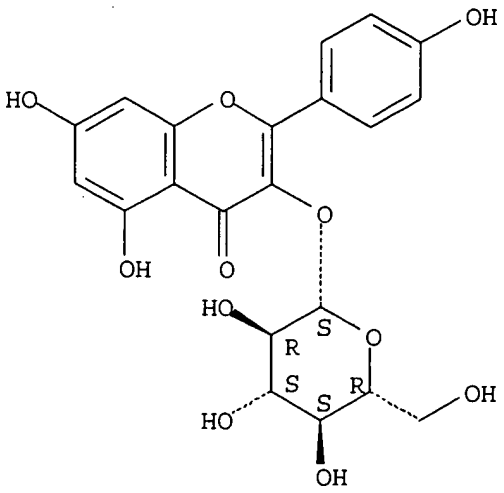


L12 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:516083 HCAPLUS
DOCUMENT NUMBER: 135:91906
TITLE: Manufacture of persimmon leaf extract
INVENTOR(S): **Kotani, Mayumi**; Fujita, Akito; **Matsumoto, Motonobu**
PATENT ASSIGNEE(S): Sunstar, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001190241	A2	20010717	JP 2000-3576	20000112

JP 3643928 B2 20050427
PRIORITY APPLN. INFO.: JP 2000-3576 20000112
AB Leaf extract of Diospyros kaki is manufactured using aqueous EtOH (EtOH content ≥30%) or H2O as a solvent. The extract shows high **astragalin** content and low astringency.
IC ICM A23L001-212
ICS A23L001-30
CC 17-14 (Food and Feed Chemistry)
ST persimmon leaf ext **astragalin**; extn solvent ethanol water persimmon leaf
IT Persimmon (Diospyros kaki)
Solvent extraction
(manufacture of persimmon leaf extract with high **astragalin** content and low astringency)
IT **480-10-4**, **Astragalin**
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(manufacture of persimmon leaf extract with high **astragalin** content and low astringency)
IT **64-17-5**, Ethanol, uses **7732-18-5**, Water, uses
RL: NUU (Other use, unclassified); USES (Uses)
(solvent; manufacture of persimmon leaf extract with high **astragalin** content and low astringency)
IT **480-10-4**, **Astragalin**
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(manufacture of persimmon leaf extract with high **astragalin** content and low astringency)
RN 480-10-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **64-17-5**, Ethanol, uses **7732-18-5**, Water, uses
RL: NUU (Other use, unclassified); USES (Uses)
(solvent; manufacture of persimmon leaf extract with high **astragalin** content and low astringency)
RN 64-17-5 HCAPLUS
CN Ethanol (9CI) (CA INDEX NAME)

H_3C-CH_2-OH

RN 7732-18-5 HCAPLUS
CN Water (8CI, 9CI) (CA INDEX NAME)

H_2O

L12 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:18920 HCAPLUS
DOCUMENT NUMBER: 134:76418
TITLE: Gray hair prevention using kaempferol-3-glucoside
INVENTOR(S): **Kotani, Mayumi**; **Matsumoto, Motonobu**; **Fujita, Akihito**; Kobayashi, Satomi
PATENT ASSIGNEE(S): Sunstar, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001002575	A2	20010109	JP 1999-173735	19990621
PRIORITY APPLN. INFO.:			JP 1999-173735	19990621

AB This invention relates to the use of kaempferol-3-glucoside (I) for the prevention of gray hair. I can be formulated as a food, cosmetic, or medication. I promotes the production of melanins. A chewable tablet contained I 5, xylitol 298, aspartame 6, Mg stearate 10, and flavors 1 mg.

IC ICM A61K031-70
ICS A23L001-30; A61K007-00; A61K007-48; A61K031-00; A23G001-00; A23G003-30; A23G009-02; A61K007-06; C07H017-07
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 17, 62
ST kaempferol glucoside melanin promoter gray hair; chewable tablet **astragaline** gray hair darkening
IT Hair preparations
(creams; oral or topical administration of kaempferol-3-glucoside for darkening gray hair)
IT Hair preparations
(growth stimulants; oral or topical administration of kaempferol-3-glucoside for darkening gray hair)
IT Hair preparations
(lotions; oral or topical administration of kaempferol-3-glucoside for darkening gray hair)
IT Chocolate
Ice cream
(oral or topical administration of kaempferol-3-glucoside for darkening gray hair)
IT Melanins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(production promotion in; oral or topical administration of kaempferol-3-glucoside for darkening gray hair)
IT Drug delivery systems

(tablets, chewable; oral or topical administration of kaempferol-3-glucoside for darkening gray hair)

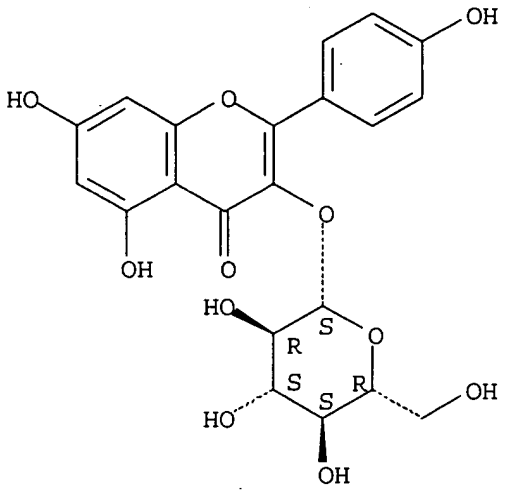
IT **480-10-4**, Kaempferol-3-glucoside
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral or topical administration of kaempferol-3-glucoside for darkening gray hair)

IT **480-10-4**, Kaempferol-3-glucoside
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral or topical administration of kaempferol-3-glucoside for darkening gray hair)

RN 480-10-4 HCAPLUS

CN 4H-1-Benzopyran-4-one, 3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:572079 HCAPLUS

DOCUMENT NUMBER: 134:141496

TITLE: Persimmon leaf extract and **astragalin** inhibit development of dermatitis and IgE elevation in NC/Nga mice

AUTHOR(S): **Kotani, Mayumi**; **Matsumoto, Motonobu**; **Fujita, Akihito**; Higa, Shinji; Wang, Way; Suemura, Masaki; Kishimoto, Tadamitsu; Tanaka, Toshio

CORPORATE SOURCE: Research and Development Center, Sunstar Incorporation, Osaka, 565-0871, Japan

SOURCE: Journal of Allergy and Clinical Immunology (2000), 106(1, Pt. 1), 159-166
CODEN: JACIBY; ISSN: 0091-6749

PUBLISHER: Mosby, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors previously found that persimmon leaf extract contains antiallergic substances that inhibit histamine release by human basophilic

cell line KU812 in response to cross-linkage of FcεRI. The purpose here was to identify substances in the persimmon leaf extract that are responsible for the effect and to examine their in vivo effects on the allergic mouse model. HPLC anal. of persimmon leaf extract was done to measure its content. Inhibitory activity of persimmon leaf extract or its major constituent **astragalin** on the histamine release by KU812 cells was examined To investigate the effects of these substances in vivo, models of passive cutaneous anaphylaxis and atopic dermatitis mice (NC/Nga) were used. Persimmon leaf extract or **astragalin** inhibited histamine release from KU812 in response to cross-linkage of FcεRI. Oral intake of both substances dose dependently inhibited passive cutaneous reactions. Moreover, oral administration of these substances to NC/Nga atopic dermatitis model mice led to suppression of the development of dermatitis, scratching behavior, and serum IgE elevation. Histol. analyses revealed that infiltration of inflammatory cells, especially degranulated mast cells, thickening of the epidermis, and prominent hyperkeratosis, were reduced. Immunol. studies showed that the capacity of spleen T cells to produce both IL-4 and IL-13, but not IFN-γ, was downregulated by oral intake of these substances. This study thus demonstrates a novel activity of **astragalin** and the dramatic effect of persimmon leaf extract and **astragalin** on atopic dermatitis model mice.

CC 1-7 (Pharmacology)
Section cross-reference(s): 15, 17

ST persimmon leaf ext **astragalin** atopic dermatitis model IgE

IT Immunoglobulins
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(E; persimmon leaf extract and **astragalin** inhibit development of dermatitis and IgE elevation in mouse model)

IT T cell (lymphocyte)
(T cell formation of both interleukin-4 and interleukin-13 but not interferon γ is downregulated by oral intake of persimmon leaf extract and **astragalin**)

IT Interleukin 13
Interleukin 4
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(T cell formation of both interleukin-4 and interleukin-13 but not interferon γ is downregulated by oral intake of persimmon leaf extract and **astragalin**)

IT Dermatitis
(atopic; persimmon leaf extract and **astragalin** inhibit development of dermatitis and IgE elevation in mouse model)

IT Allergy inhibitors
Persimmon (Diospyros)
(persimmon leaf extract and **astragalin** inhibit development of dermatitis and IgE elevation in mouse model)

IT Interferons
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(γ; T cell formation of both interleukin-4 and interleukin-13 but not interferon γ is downregulated by oral intake of persimmon leaf extract and **astragalin**)

IT **480-10-4, Astragalin**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

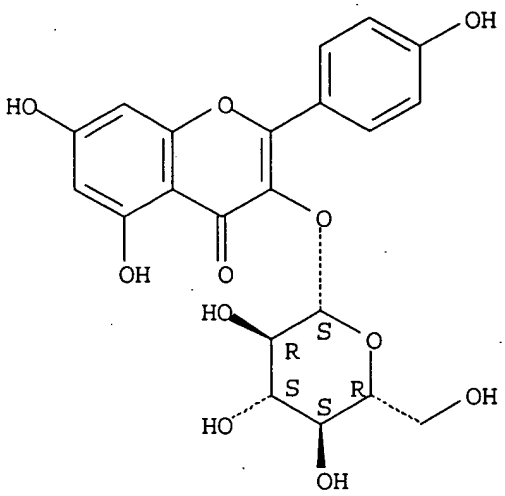
(persimmon leaf extract and **astragalin** inhibit development of dermatitis and IgE elevation in mouse model)

IT **480-10-4, Astragalin**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(persimmon leaf extract and **astragalin** inhibit development of dermatitis and IgE elevation in mouse model)

RN 480-10-4 HCAPLUS

CN 4H-1-Benzopyran-4-one, 3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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